Nevada Division of Environmental Protection
Bureau of Water Quality Planning

Project Wet -- Water Education for Teachers

Annual Water Festival held for Students from Jacks Valley Eleimentary School 5th grade; Pioneer High School Teen Facilitators Rock!!

The annual Make a Splash water festival was conducted at Fuji Park on Tuesday, Sept. 25, for 90 5th graders from Jacks Valley Elementary School (JVES). The water festival was an all day event where students explored a variety of water-related topics relevant to the Carson River and natural water systems. Learning stations included lessons on stream restoration, stream biology and stream chemistry, the hydrologic cycle, and local Native American culture.

The Nevada Division of Environmental Protection (NDEP) and River Wranglers sponsor the Make a Splash water festival, a day of outdoor education where students actively engage in hands-on water activities and investigations. This annual event was coordinated by Mary Kay Riedl (Project WET Coordinator) and Linda Conlin (River Wranglers).

Project WET and River Wranglers strive to provide an educational framework for teachers and students to explore water science. A core belief is that awareness of and respect for water resources encourages a lifelong commitment of responsibility and positive community participation. Water is connected to all aspects of our lives and our community.

This year's festival featured Pioneer High School student facilitators who worked in teams to present lessons as JVES students rotated through learning stations every 25 minutes. The teen facilitators received prior training from resource professionals to hone their understanding of each lesson presented. The water festival was a tremendous success as a result of the facilitator's outstanding efforts as well as the 5th grade students' eagerness to learn from their teen mentors.

Teen facilitators at the Stream Chemistry station discussed the importance of monitoring our water quality. Basic field tests were conducted on water samples collected from a nearby wetland, Clear Creek, and surface runoff from the recent rain shower. Students learned that a lot can be discovered about water quality from understanding the effects of temperature, pH, dissolved oxygen, and turbidity. Tim Rowe, USGS, was on hand to assist as a surface water hydrologist.



The teen facilitators reviewed the hydrologic cycle. This term, or the more common one "water cycle," refers to the complete sky-to-earth-to-sky journey of water in nature. Facilitators reviewed water's precipitation as rain, snow, hail or dew; its journey over, around and through obstacles above, on and below the earth's surface; and its eventual evaporation and return to the atmosphere.

Fifth grades then simulated the movement of water through the water cycle by participating in the Incredible Journey. Students created a water journey bracelet and can follow-up by writing the story of their journey and sharing it in class. Eva Bauer, USGS, helped monitor the movement of (simulated) water molecules to ensure the droplets cycled without getting water logged.



Stream Biology introduced students to macroinvertebrates as biological indicators of water quality and overall health of a river system. Student volunteers were dressed with various prop adaptations of aquatic insects that allow the insects to live in an aquatic environment. Teen facilitators helped students learned to identify macroinvertebrates sensitive to pollutants and other insects that are pollution tolerant.



The students were fascinated by the lesson from Native American Elders. Native Elder, Andy Allen, told entertaining stories to teach about relationships between people and nature. Story-telling is often used by Native Americans as a way to preserve the culture and history of their people. Native stories explain the place of humans in the natural world. Their symbolism reflects how the American Indians saw their place in the natural environment and how their beliefs are grounded in a reverence for nature. At the root of most ancient stories is an explanation, a moral, or a lesson.

Native Elders, Ralph Burns and Marlin Thompson, shared tools used to hunt and fish or to gather, harvest or grow food. They talked about the different Bands of the Nevada Paiute Tribe and seasonal activities that were dictated by the environment.



The Clear Creek Stream Restoration station started with a demonstration by the teen facilitators where they used the Project Wet activity, A Drop in the Bucket to illustrate that potable water is limited for our use. The facilitators and resource professionals from the Clear Creek Watershed Council talked about how we can improve a stream's function by planting a variety of vegetation, including cottonwood, willow, annual flowers, and perennial grasses. Students became involved in planting and at the end of each session; the students were reminded about why we made layers to provide diverse habitat. The students are looking forward to showing their families the work they did.



Information itself does not create behavior change; it takes the dissemination of that information in a way that's compelling and exciting - and empowering - for action to begin. Excerpt from Phillippe Cousteau, Oceanograph

Print Page

Project Wet Home Page
Water Quality Planning Home Page
Site Map — Topic Index
NDEP Home Page